

## UNIQUE USE OF BASAMID IN COMBINATION WITH OTHER FUMIGANTS IN CALIFORNIA STRAWBERRIES

Robert Webb\*, Driscoll Strawberry Associates, Watsonville, California

Ninety-six acres of strawberries were grown during the 1997-98 season in trials using a combination of Basamid and "C35" (a mixture of 65% Telone and 35% chloropicrin). Methods of application were adapted to specific growing areas depending upon soil type, fumigation practices, and use of plastic mulch. In northern growing districts (Watsonville and Salinas) C35 was broadcast applied at 32 gpa and tarped. Following tarp removal, bed-up and shaping, Basamid was applied with a drop spreader at 150 and 200 lbs/a to bed tops and furrow bottoms. Overhead irrigation was applied immediately following application at a rate of 1.0 to 1.5" allowing the complete dissolution of the granular Basamid and movement of the resulting MITC to a minimum depth of 3-4 inches. Three additional sprinkler applications of 0.25 " at daily intervals were necessary to mitigate odor and maintain a "water seal". In southern California, Basamid was applied with a drop spreader at a rate of 100 and 150 lbs/a to the surface of preformed beds and immediately sprinkled in to a minimum depth of 3 inches (0.75 to 1.25" precipitation). Seven to 14 days later, "C35" was applied as a bed fumigant at 25 gpa and tarped. Strawberry plants were planted thorough the plastic mulch after an additional 18 to 21 days. Under the conditions for these trials, no residual Basamid nor MITC was detected after 7 days, except in one trial where the grower attempted to rely upon 0.25" of rainfall to incorporate the Basamid. In this case, crop loss was sufficient to require replanting. Weed control and yield were evaluated in 4 of the 10 trial plots. The combination treatment of Basamid and Telone/chloropicrin resulted in weed control, yield and growth promotion comparable or exceeding Mbr/chloropicrin in 3 of the 4 plots evaluated.

### Yield (gms/plot)

Treatment	Trial 1	Trial 2	Trial 3	Trial 4
C35	5139a*	5263a	ND	ND
Basamid+C35	5389a	5894a	3421a	3009b
No Fumigation	3405b	3733b	ND	ND
Mbr/Pic	5742a	5722a	3415a	3521a
Chloropicrin	5182a	ND	ND	ND

\*Values followed by a different letter are significantly different at the 0.01 level.

### Weed Control (Number/30' bed)

Treatment	Trial 1	Trial 2	Trial 3	Trial 4
C35	ND	ND	ND	ND
Basamid+C35	40a	275a	15a	30a
No Fumigation	310b	>800b	ND	ND
Mbr/Pic	630c	>800b	88b	60b
Chloropicrin	ND	ND	ND	ND

